ON SOME TROPICAL POLYCHAETA IN THE BRITISH MUSEUM, MOSTLY COLLECTED BY DR. C. CROSSLAND AT ZANZIBAR, TAHITI AND THE MARQUESAS.

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(With 4 text-figures.)

II. FAMILIES **SYLLIDAE** AND **HESIONIDAE**.

Note.—The first part of this paper containing an account of the Families *Amphinomidae* and *Phyllodocidae* was published in the August number of the *Annals and Magazine of Natural History* for the present year.

FAMILY **SYLLIDAE.**

Genus **Syllis** Savigny 1816.

1. **Syllis variegata** Grube 1860.

Fauvel, 1923, p. 262, fig. 97, *h–n*; and 1932, p. 76.

Occurrence.—Red Sea (3); Marquesas (5); Taunoa Reef, Tahiti (3); Fautaua Reef, Tahiti (5); Papeete, Tahiti (6); Hava Hevane Reef, Tahiti (3); Cape Verde Islands (3).

Distribution.—Atlantic, Mediterranean, Indian Ocean, Pacific.

Remarks.—I find the discrimination of these Syllids extremely difficult. A number show rather long and slender blades to the upper chaetae in the front region, and I was tempted to ascribe them to *S. alternata* Moore. According to the Berkeleys, the latter has the palps fused at the base, a character which is often very difficult to verify on the material, and examples of *S. variegata* often have rather long and slender blades to the bristles in the anterior region. Unfortunately I have no examples of *S. alternata* for comparison. *Syllis harti* E. and C. Berkeley, which the Berkeleys claim to show affinities with *S. alternata* especially in the linear dorsal bristles, is quite distinct from my material and has altogether longer blades to the bristles.

I can find no eyes in the Cape Verde specimens which bear some resemblance to *S. caeca* mihi from the Panama region, but otherwise they agree with *S. variegata*.

2. **Syllis gracilis** Grube 1840.

Fauvel, 1923, p. 259, fig. 96, *f–i*; and 1932, p. 76.

Occurrence.—Marquesas, from various washings (numerous); Tahiti; Papeete Harbour, 15 ms. (5); and from washings near Papeete (numerous); Suez (1); Sherm Sheikh, Red Sea (1).

Distribution.—Atlantic, Mediterranean, Red Sea, Indian Ocean, Pacific.

Remarks.—This is probably the most abundant Syllid in the washings. In some of the young specimens from Papeete Harbour the fusion of the shaft with the blade in the large crutch-like chaetae is not yet complete. According to E. and C. Berkeley (1938, p. 41), the simple chaetae in *Syllis elongata* (Johnson)

are not formed, as Moore believed, by the fusion of the blade with the shaft as in *S. gracilis*, but by the shedding of the blade as in *S. amica* Quatrefages.

3. **Syllis hyalina** Grube 1863.

Fauvel, 1923, p. 262, fig. 98, *a–b*.

Occurrence.—Chuaka, Zanzibar, 2–3 ms. (2); Red Sea (4); Marquesas (2); Tahiti (3).

Distribution.—Atlantic, Mediterranean, Indian Ocean, Pacific.

Remarks.—I have referred a number of small Syllids to this species on the ground of the short and slender cirri and the bidentate character of the bristles throughout. I have provisionally separated this species from *S. closterobranchia* Schmarda (v. Fauvel, 1932, p. 77) because in Schmarda's species the chaetae are usually unidentate in the middle region of the body and the dorsal cirri are relatively stout and fusiform. Practically it is often very difficult to decide to which of the two species a specimen belongs, and the distinction between them is doubtfully valid.

4. **Syllis spongicola** Grube 1856.

Fauvel, 1923, p. 257, fig. 95, *a–d*; and 1932, p. 76.

Occurrence.—Miludumadulu, Maldives (coll. J. Stanley Gardiner) (1); S. Nilandu, Maldives (coll. J. Stanley Gardiner) (1); Torres Straits (coll. F. A. Potts) (1); Red Sea (5); Zanzibar, 10 ms. (1); Suez Bay, $4\frac{1}{2}$ ms. (5); Tahiti (10); Marquesas, from blue sponge (numerous).

Distribution.—Atlantic, Pacific and Indian Oceans.

Remarks.—There is much variation in size and shape of body in these specimens, but they all agree in having the main axis of the second tooth of the bristles at right angles to the shaft. In *S. depressa* Augener and in Fauvel's var. *dollfusi* the second tooth is either more or less parallel with the main tooth or else it is reduced to a small boss.

On the specimens from Tahiti Augener has the following note: "Living in sponge which is green outside and yellow within. The Syllids are the same colour, obviously no protective significance. No details recorded, as only seen by naked eye alive. Dead when washed out but colour seems to be uniform. Body slender, feet well developed, but cirri and tentacles small."

5. **Syllis zonata** (Haswell) 1886.

Gnathosyllis zonata Haswell, 1886, p. 746, pl. 52, figs. 4–6.
Augener, 1913, p. 195, pl. 3, fig. 22, and text-fig. 21 *a–c*.

Occurrence.—Tahiti (numerous); Marquesas (numerous).

Distribution.—South and South-west Australia, Galapagos Islands, Marquesas.

Remarks.—One of the larger specimens measures about 20 by 1 mm. for about 80 chaetigers. As far as can be seen on preserved material, the colour pattern is very variable. There are typically three purplish brown bands in each segment, but these may be fused so that the whole dorsum is a more or less uniform purplish brown. Dark spots at the base of the dorsal cirri may be present or absent, and the dorsal cirri may or may not be banded with brown. In some of the smaller and presumably younger specimens the more or less

uniformly brown dorsum carries dorso-lateral pairs of white spots in some but not in all the segments of the front region.

The dorsal cirri are rather massive, of moderate length and with large clearly separated articles. In the larger specimens the number of articles is alternately about 25 and 12.

The bristles are all clearly bidentate, but show nothing characteristic.

Crossland has the following note on some specimens from Tahiti: "Not seen alive. Only found after long narcotization of material. Large with long dorsal cirri over the back, conspicuous palps. The body is almost uniformly dark brown dorsally, white ventrally, and dorsal cirri are banded brown and white. Small white spots dorso-laterally in first few segments, but not on all, may be alternate or on every third. This brown colour breaks into patches and dies out before half the body length, and before the brown on the body begins to go the dorsal cirri have but one brown band or none."

Another note on some specimens from Tahiti is as follows: "Very distinctly striped brown. May be a variety of 229 (the note given above), but not noted there whether the dorsal cirri are annulated or not. These are smooth and have brown dots throughout the length of the body, numerous on anterior cirri, one or two on posterior. Ground colour whitish. Palps small. Ground colour of body anterior third yellowish, after which sudden change to dark, dull, green. Brown lines, three to the segment, conspicuous on both ground colours, but naturally more so anteriorly. Underside without marks.

"8.vi.25. Coralline weed. A deeply pigmented specimen, brown bands confluent on first 12 setigerous segments, so leaving intersegmental lines conspicuous.

"There are two species of Syllid with brown bands: this one with 2 long and 1 shorter band per anterior segment, 2 dots on side of body below the banded area and dots on dorsal cirri which are smooth."

Crossland is wrong in saying that the dorsal cirri are smooth. The other banded species to which he refers is *Trypanosyllis zebra*, under which heading the note is given.

6. **Syllis corallicola** Verrill 1900.

Monro, 1933, p. 249, fig. 3, *a–b*.

Occurrence.—Praslin, Seychelles (J. Stanley Gardiner) (1).

Distribution.—West Indies, Seychelles.

Remarks.—An anterior fragment measuring 7 by 1 mm. for 26 chaetigers. I have compared it with some specimens from Dry Tortugas attributed by me to Verrill's species, and I believe them to be conspecific. The bristles in the front region have rather long and slender blades, and the dorsal cirri have alternately between 60 and 70 and between 30 and 40 articles. The bristles are bidentate throughout.

7. **Syllis armillaris** (Malmgren) 1867.

Fauvel, 1923, p. 264, fig. 99, *a–f*.

Occurrence.—Agig Bay, Red Sea, $4\frac{1}{2}$ fins (1).

Distribution.—Arctic, Atlantic, Mediterranean, Pacific.

Remarks.—I had some hesitation in reporting this species from the Red Sea, but except that the eyes cannot be seen, the specimen shows all the characteristic features of the species. Apart from northern Europe and the Mediterranean,

this species has been reported from Alaska by Moore and from Vancouver Island by Berkeley. I believe this to be the first record from tropical waters.

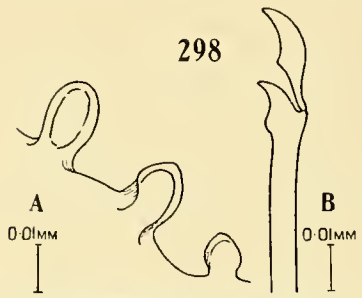
8. **Syllis verruculosa** Augener 1913 (text-fig. 298).

Augener, 1913, p. 203, pl. iii, fig. 39, and text-fig. 24, *a–c*.

Occurrence.—Wasin, Zanzibar, 7–10 fins (1).

Distribution.—South-west Australia, Zanzibar.

Remarks.—The single specimen is colourless and measures 17 by 1 mm. for 62 chaetigers. There is a very broad and more or less rectangular prostomium, such as Augener figures. The pharynx reaches to the 6th chaetiger and the proventriculus to the 11th. The tooth is anterior. The body is rather sparsely dotted with large cylindrical or conical papillae (text-fig. 298, A), which become smaller towards the hinder end. The dorsal cirri have 15 to 20 articles. The bristles are all unidentate, and in the hinder region the ends of the shafts are much expanded and the tips bent outwards (text-fig. 298, B). The blades consist of small curved hooks, which in shape to some extent resemble the hooks in the hinder feet of *Syllis exilis*. They are smaller than the latter and not so much modified. This appears to be an uncommon species, for I know of no record of its occurrence other than the original.



TEXT-FIG. 298.—*Syllis verruculosa*: A, papillae (× ½); B, bristle from hinder region (× ⅔).

9. **Syllis exilis** Gravier 1900.

Gravier, 1900, p. 160, pl. x, fig. 9.
Fauvel, 1932, p. 77.
Syllis fuscosuturata Augener, 1927, p. 52.
Monro, 1933A, p. 32, fig. 14, *a–e*.

Occurrence.—Zanzibar, 7–10 ms. (7); Tahiti (2).

Distribution.—West Indies, Red Sea, Indian Ocean, Pacific.

Remarks.—This is a fairly common tropical species inhabiting dead coral, and it is less well represented in the Tahiti and Marquesas washings than I should have expected.

On a specimen from Tahiti Crossland has the following note: "Among fucoid weed with the preceding (*Syllis variegata*) and *Nereis dumerilii*. White with bright green-grey markings, as sketch, as far as the end of the buccal apparatus, after which the connexion between the pair of marks is only visible sometimes." (Crossland's sketch shows in the anterior part of the segment a pair of rectangular marks joined by a line at the inner and hinder corners. This is followed by a single rectangular mark in the hinder part of the segment.) "After this a small black dot in the middle of each segment over the opaque white gut. Palps large, four small bright red eyes. Dorsal cirri long and very slender, colourless but marked with minute dark dots, visible under a lens. Dorsal cirri appear smooth."

10. **Syllis vittata** Grube 1840.

Fauvel, 1923, p. 263, fig. 98, *i–l*.

Occurrence.—Marquesas, Hiva Oa (3); Moorea shore, Papeete (4).

Distribution.—Atlantic, Mediterranean, Pacific (?).

Remarks.—With some hesitation I have assigned these specimens to Grube's

species. The colour has faded, but otherwise I see no ground for separation. The cirri in the front region are about twice as long as those near the hinder end. The longer anterior dorsal cirri show about 40 articles and those of the posterior region about 20. The dorsal cirri are less stout and fusiform than in *S. krohnii* and the heads of the chaetal shafts less enlarged. The specimens from Moorea show a slight second tooth on the chaetal blades. The present examples may belong to *S. fasciata* Malmgren, an arctic species, which Fauvel has recorded from Japan and the Gulf of Petchili.

11. **Syllis krohnii** Ehlers 1864.

Fauvel, 1923, p. 259, fig. 96, *a–e* ; and 1934, p. 303.

Occurrence.—Marquesas, Hiva Oa (numerous) ; Red Sea (1) ; Zanzibar (2) ; Seychelles (1) ; Cape Verde Islands (2).

Distribution.—Atlantic, Mediterranean, Indian Ocean, Pacific.

Remarks.—The markings on the specimens from the Cape Verde Islands are different from those on the material from the Marquesas. The latter have the dorsum coloured reddish brown in varying degrees, the colour showing a tendency to break up into segmental markings ; the Cape Verde specimens have a single clearly defined purple band in each segment.

In some specimens the dorsal cirri show traces of banding.

12. **Syllis (Ehlersia) cornuta** Rathke 1843.

Fauvel, 1923, p. 267, fig. 100, *g–i*.

Occurrence.—Marquesas, from various washings (15) ; Tahiti (1).

Distribution.—Atlantic, Mediterranean, Indian Ocean, Pacific.

Remarks.—A number of these specimens have very short dorsal cirri with alternately about 14 and 10 articles and each article encloses one or two brown, refringent bodies. These examples usually have only one *Ehlersia* bristle in each foot, and these bristles are absent from the first few chaetigers. I was tempted to separate them from *cornuta* and attribute them to Grube's *cerina* with which they agree well, but there are other specimens which grade into the typical *cornuta* with a higher number of articles to the dorsal cirri and two or three *Ehlersia* bristles in the feet.

The specimen from Tahiti has with it a reference to the following note by Crossland : " 5.vi.25. Salmon pink from end to end without markings, rather darker at head end. Long palps, eyes red and very small. Dorsal cirri colourless, smooth, fairly long. 8.vi.25. Mossy weed on stones exposed to surf Fautaua Reef. Colour much fainter, just visible in body wall, conspicuous on head, palps and walls of pharynx. Rest of body coloured brown by gut only."

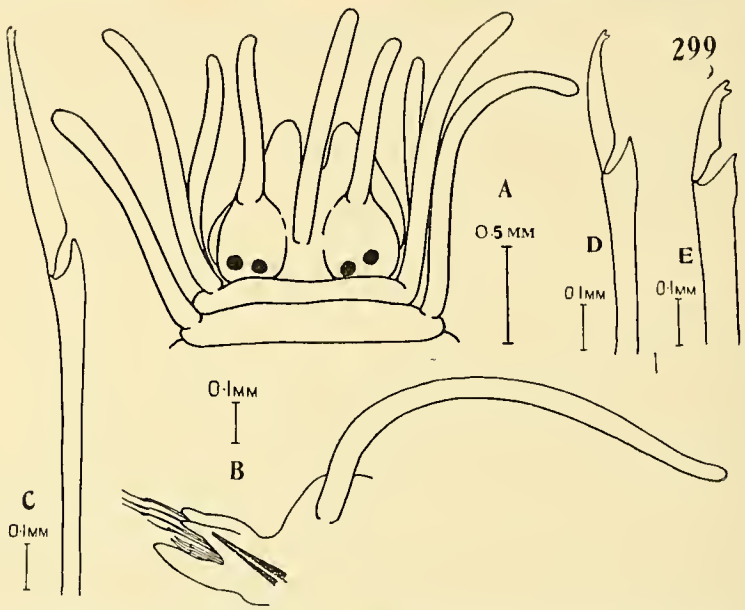
The European representatives of this species are yellowish white or colourless. Crossland's note may refer to some specimens of *S. variegata* which were with the example of the present species, but in my opinion his account of the colour is more likely to refer to the *S.* (*E.*) *cornuta*.

Genus **Pionosyllis** Malmgren 1867.

13. **Pionosyllis marquesensis** n.sp. (text-fig. 299).

Occurrence.—" Among weed, etc., lining pool on the shore shelf at Tai o Hae, Marquesas, common in this situation and under stones in the pool. Its colour makes it conspicuous, though it is small." (Crossland) (8) ; Tahiti (1).

Description.—One of the larger specimens measures 37 by 1 mm. for 118 chaetigers. The head (text-fig. 299, A) is broader than long, divided by slight grooves into two lobes separated by the median tentacle. There are two pairs of eyes set in a widely open arc. The palps are broad and fused at their base. The median and lateral tentacles are subequal, about twice the length of the head, and slightly shorter than the tentacular and anterior dorsal cirri. Both tentacles and dorsal cirri are vaguely and irregularly constricted. The pharynx reaches to the 7th chaetiger and the proventriculus to the 12th. The rim of the pharynx is smooth and surrounded by a circlet of about 16 papillae. The tooth is not quite anterior. The dorsal cirri are alternately longer and shorter, the longer extending a little more than halfway across the back, and the shorter having about half this length. The feet (text-fig. 299, B) are supported by two



TEXT-FIG. 299.—*Pionosyllis marquesensis*: A, head from above (× ½); B, foot from anterior region (× ½); C, upper bristle (× ½); D, lower bristle (× ½); E, lower bristle from hinder foot (× ½).

or three dorsal acicula. They are rather long and narrow and at the apex the lips are continued into a pair of cirriform processes. The ventral cirrus is slender and reaches to the end of the foot. About the four uppermost bristles in each foot are narrow and linear (text-fig. 299, C) and end in delicate, clearly bidentate tips. The lower bristles (text-fig. 299, D) have shorter and more curved blades also with clearly bidentate tips. There is little change in the feet throughout the body. In the hinder region the blades (text-fig. 299, E) of the more ventral bristles are shorter and more curved than in the front region. The body ends with a pair of pygidial cirri.

Remarks.—This species shows affinities with the Antarctic *P. stylifera* Ehlers, but is distinguished by the presence of the slender linear bristles and by the absence of the enlargement of the dorsal cirrus of the first chaetiger. Augener has described from South-west Australia two species, *P. ehlersiaeformis* and *P. weissmannioides*, both with linear bristles of the *Ehlersia* type, but these bristles are unidentate in both and of a different form from the linear bristles in

the present species. *P. divaricata* (Keferstein) is also an allied species, but differs in having unidentate bristles.

In spirit the colour is pale yellow, but of its colour in life Crossland gives the following account: "Colour yellow, deeper posteriorly, one specimen full of greenish eggs posteriorly. The body is thick and soft, thicker than the prostomium, feet small, with long slender dorsal cirri. Prostomium deep in colour, orange, with red eyes. Behind this is a conspicuous opaque white spot, rather irregular, occupying most of the dorsum of the peristomium. From about the 5th segment a pair of clear white spots on each segment, one either side of the middle line. The translucence of the body makes these opaque spots the more conspicuous."

Of the two species of *Pionosyllis* described by Moore from the north Pacific, *P. gigantea* has altogether longer dorsal cirri and flattened, foliaceous ventral cirri and *P. magnifica* also has flattened ventral cirri partly fused with the feet and lacks the slender, linear bristles of the present species.

Of the specimen from Tahiti Crossland writes: "One specimen from the coralline weed of Fautaua Reef. In spite of small size it is easily identified by the naked eye by the white spot on the peristomium."

Genus **Opisthosyllis** Langerhans 1879.

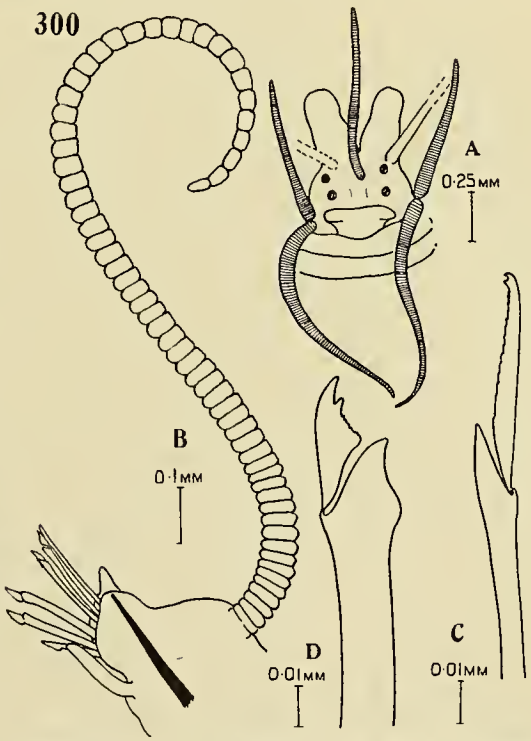
14. **Opisthosyllis brunnea** Langerhans.

Fauvel, 1930, p. 15, fig. 2, *a–k*.

Occurrence.—Tai o Hae, Marquesas (1); Seychelles (J. Stanley Gardiner) (2).

Distribution.—Eastern Mediterranean, Atlantic, Indian Ocean, Pacific.

Remarks.—The specimen from the Marquesas has a long regenerating area at the hinder end. There are no papillae. The number of articles of the longer dorsal cirri is about 30. The bristles are unidentate throughout. In spirit the colour is a brownish yellow dorsally.



Text-fig. 300.—*Opisthocyllis longicirrata:* A, head from above (× ⅔); B, middle foot (× ⅓); C, anterior bristle (⅔); D, large bristle from hinder region (× ⅔).

15. **Opisthosyllis longicirrata** n.sp. (text-fig. 300).

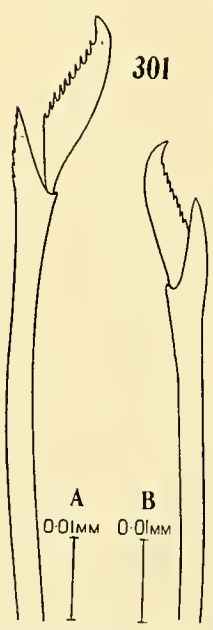
Occurrence.—Hululu Male Atoll, Maldives (J. Stanley Gardiner) (2); Red Sea (2); Suez (1); Tahiti, Taunoa Reef (2).

Description.—The specimens from the Maldives are the best preserved, and the larger of these measures 19 by 1 mm. for 74 chaetigers. All colour markings have disappeared. The head (text-fig. 300, A) is more or less bilobed,

grooved posteriorly and carries two pairs of eyes set in a rectangle. There is a large nuchal flap or gibbosity. The median tentacle is about three times as long as the palps and has between 50 and 60 articles. The lateral tentacles are all incomplete. The pharynx reaches to about the 10th chaetiger and the proventriculus to the 18th. The tooth lies in about the 8th chaetiger.

The feet (text-fig. 300, B) are triangular in outline and are supported by two or three dorsal acicula. The dorsal cirri in the front region are very long and have about 120 articles. They are shorter in the hinder region, one of the longer type having about 60 articles. In the hinder region the apexes of the pedal lips are prolonged into a pair of small papilliform processes. The ventral cirri are short, not reaching to the end of the feet. The bristles are all clearly bidentate; the blades in the front region (text-fig. 300, C) are rather slender and elongate, and they become shorter and broader from before backwards. In the hinder region there are at the base of the foot two or three chaetae larger than the rest, but of similar shape (text-fig. 300, D). There is no papillation.

Remarks.—Of the species of *Opisthosyllis* known to me, *O. brunnea*, *O. nuchalis*, *O. viridis*, *O. australis* and *O. ankylochaeta* the present species is nearest to Augener's *O. australis*. It differs in having clearly bidentate bristles throughout, in its much longer dorsal cirri and in the absence of all papillation. The presence of two or three bristles considerably larger than the rest in the feet of the hinder region recalls Fauvel's *O. ankylochaeta*, but in Fauvel's species these bristles are simple, the blade being fused with the shaft. Moreover, in *O. ankylochaeta* the bristles are unidentate.



TEXT-FIG. 301.—*Opisthosyllis viridis*: A, anterior bristle (× ½); B, bristle from middle region.

16. **Opisthosyllis viridis** Langerhans 1879 (text-fig. 301).

Langerhans, 1879, p. 543, pl. xxxi, fig. 9, *a–c*.

Occurrence.—Taa Hu Ku Bay, Hiva Oa, Marquesas, from three washings, W. 39, W. 41 and W. 44 (3).

Distribution.—Madeira, Marquesas.

Remarks.—The best preserved of these specimens is from W. 44 and measures 7 by 0·5 mm. for about 60 chaetigers. In spirit there is no colour. As in Langerhans's figure, there are two pairs of eyes in a widely open arc and a papillated nuchal flap reaches forward almost to the eyes. The median tentacle reaches just beyond the palps and has about 15 articles. The laterals are a little shorter. The body is papillated. The pharynx reaches to the 10th chaetiger and the proventriculus to the 17th. The tooth lies in the 9th. In the larger but poorly preserved specimen from W. 39, measuring 13 by 1 mm. for 67 chaetigers, the pharynx reaches to the 15th chaetiger, the proventriculus to the 22nd, and the tooth lies in the 13th. In the smaller specimen the number of articles of the longer dorsal cirri is about 15; in the larger a few of the longer cirri in the front region have as many as 25 articles.

The bristles (text-fig. 301, A and B) are unidentate throughout and except for a slight expansion of the head of the shaft in the hinder region show little

change from before backwards. In the hinder region there is a single needle-like simple bristle in the feet.

Remarks.—These specimens agree well with Langerhans's description except that he states that the bristles are bidentate. He also figures two bristles (fig. 9, *b* and *c*), and of these fig. 9, *c* shows a very minute second tooth, but fig. 9, *b* appears to be unidentate, as are the bristles of my specimens. In the Syllids it is often difficult to decide whether a bristle is bidentate or not because the hairs at the top of the concave surface of the blade suggest the presence of a minute second tooth.

Augener's *O. australis* is an allied species, but according to his description the longer dorsal cirri have about 40 articles, the bristles are clearly bidentate anteriorly and unidentate posteriorly and the papillation is apparently inconstant.

Genus **Trypanosyllis** Claparède 1864.

17. **Trypanosyllis zebra** Grube.

Fauvel, 1923, p. 269, fig. 101, *a–e*; and 1932, p. 78.

Occurrence.—Suez, mud flat (coll. Potts) (1); Zanzibar (4); Red Sea (6); Tahiti (1).

Distribution.—Atlantic, Mediterranean, Indian Ocean, Pacific.

Remarks.—The specimen from Tahiti is unfortunately much damaged, and although I believe it to belong to this species its determination remains uncertain. Crossland has the following note on it: "Has a long body tinged pink like the dorsal cirri which are finely annulated, banding confined to the pharyngeal area, two bands of equal length per segment over a pink or yellow, not white, ground. One specimen has a sexual bud full of pink eggs." There is also a female sexual bud which from its highly flattened shape and the character of its bristles may very well belong to this species. Crossland has the following note: "Size 15 mm. by 3 mm. when dead, not seen alive. Washed out of coral from shore reef at Taunoa. Colour creamy, apparently full of sexual products, with rather vaguely outlined red-brown intersegmental lines and specks of same colour between the feet. These lines also on the ventral surface. Dorsal cirri fairly long, slender, moniliform, pink. Head appears scarcely to be made out, but 4 very large red eyes. Dorsal cirri of first two segments long and thicker than ordinary. Feet uniramous, setae directed upwards at angle of about 45 degrees."

18. **Trypanosyllis misakiensis** Izuka 1912.

Izuka, 1912, p. 185, pl. xx, figs. 2–6.
Fauvel, 1932, p. 79.

Occurrence.—Red Sea, Crossland (2).

Distribution.—Japan, Madras Coast, Red Sea.

Remarks.—Two milk-white specimens without any buds. The absence of pigment together with the separation of the apical from the second tooth of the chaetal blades suggests that these specimens belong to this species. They also agree with Izuka's account in the shape of the head and the form of the dorsal cirri.

FAMILY **HESIONIDAE.**

Genus **Leocrates** Kinberg 1864.

19. **Leocrates claparedii** (Costa).

Fauvel, 1923, p. 237, fig. 88, *i–n* ; and 1932, p. 61.

Occurrence.—Red Sea (1) ; Tahiti (7).

Distribution.—Mediterranean, Red Sea, Indian Ocean, Pacific.

Remarks.—Of the specimens from Tahiti Crossland writes as follows : " Among coral Taunoa shore reef. No pigmentation or markings except a dark brown line on the peristomium. General colour a dull red-brown, one specimen dark purple (?) and containing eggs. Iridescence very brilliant, coppery and purple. ' Cushions ' at sides of body little developed anteriorly. Feet with stiffer, slightly greenish ventral setae and fan of delicate ones above. Feet colourless and base of cirri colourless and inconspicuous. Dorsal cirri brown, long and slender. No visible segmentation, fine wrinkles across body about 10 to the segment. Size largest specimen 32 mm., rest rather smaller."

Fauvel gives the colour in life as *rose-chair irisé.*

Genus **Hesione** Savigny 1809.

20. **Hesione genetta** Grube 1878.

Horst, 1924, p. 193.
Monro, 1931, p. 10, text-fig. 5.

Occurrence.—Tahiti (1) ; Barrier edge, Faa, Tahiti (1).

Distribution.—Philippines, Malay Archipelago, Great Barrier Reef, Tahiti.

Remarks.—These specimens have the back covered with brownish purple spots, confluent in places and forming bars. In the bristles the accessory tooth of the chaetal guard approaches the subapical tooth. Crossland writes as follows : " Among coral Taunoa shore reef. General colour the usual dull pink, but this specimen is mottled with brown on a pinkish white ground throughout its length. The mottlings are irregularly rounded, fewest but larger on the ' side cushions ' and aggregated in each segment to form a median irregular triangular blotch in front of which is a space with less colour. These brown markings are least regular in the anterior segments where the colour is rather more developed. Bases of dorsal cirri not conspicuous, about the same colour as the feet, transparent whitish. Dorsal cirri very slender, tinged brownish yellow. Setae greenish yellow. Acicula conspicuous. Underside marked with pink spots segmentally (? ganglia). Prostomium also pink. One pair of eyes prominent. Spotted character of the coloration is conspicuous to naked eye. Size alive 54 by 5 mm. or across feet (not setae) 9 mm."

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